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REMARKS

In response to the Office Action mailed January 20, 2004, Applicant herewith amends the claims, as shown in the above Listing Of Claims, by canceling claims 1-19, 21, 25-48, 52-76 and 87 (without prejudice); amending claims 20, 49, 50, 77, 86 and 88; and adding new claims 89-92.

Rejections Under 35 USC § 112

In the Office Action, claim 21 was rejected but has been cancelled rendering the rejection moot.

Rejections Under 35 USC § 102: Anderson et al. (5,993,627)

In the Office Action, claims 20-24 and 77-88 were rejected under 35 USC § 102(e) over Anderson et al., US Patent No. 5,993,627. Applicant respectfully requests reconsideration of this rejection because Anderson et al. fails to teach or suggest the combination of features set forth in the amended claims. Claim 20, 77 and 86 (all independent claims) recite a clamp and a staining vessel, or use of a clamp and use of a staining tank, where the clamp is supported on the staining tank in order to suspend an electrophoresis gel in the staining tank or staining vessel. As set forth in the amended claims, the clamp is supported on a portion of the staining tank and the clamp supports the gel such that the gel is suspended within the tank.

The Anderson et al. reference discloses a specially formed gel slab that includes a thick upper portion that serves as a gel handle. This gel handle includes an electrode rod extending

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therethrough. The thick upper portion of this special gel is grasped by a robotic gripper 98 that moves the gel into a staining tank where the electrode rod 94 engages a portion of the staining tank to support the gel in the tank (see FIGS. 10 and 11A of Anderson et al.). No clamp per se is disclosed in Anderson et al., rather a robotic arm is fitted with a gripping mechanism to grasp the handle portion of the custom made slab gel, lift and move the custom made gel slab.

In the present invention, as recited in independent claims 20, 77 and 86, a removable clamp is supported on an upper portion of the staining tank thereby suspending the gel slab held by the clamp. Anderson et al. neither suggests nor discloses the recited invention. Anderson et al. discloses a special custom-made slab gel formed to provide with its own supporting structure or handle within a staining tank. In the present invention, any standard slab gel may be installed in the clamp of the present invention, and the clamp supports the slab gel in the staining tank. No special features are required of the slab gel in practice with the present invention. In the Anderson et al. disclosure, the slab gel must be specially formed.

For this reason and others, Applicant respectfully asserts that claims 20, 77 and 86 are clear of the prior art and are now in condition for allowance.

In the Office Action at paragraph 7, reference is made to an "agitator motor 29" in FIG. 3. However, this reference appears to be erroneous because the motor 29 in FIG. 3 is an actuator that causes injection of molding materials into a gel mold. Specifically, in Anderson et

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al. at column 12 lines 45-47, it states that each syringe 21 "is driven by a motor 29 rotating a lead screw 30 that generates linear motion of a block 31 attached to the syringe's plunger 32."

Rejections Under 35 USC § 102: Penberthy (4,195,981) or Lyle (2,533,826)

In the Office Action, claims 49-51 were rejected under 35 USC § 102(b) allegedly over either Penberthy (4,195,981) or Lyle (2,533,826). Applicant respectfully requests reconsideration of the rejection because neither Penberthy or Lyle, alone or in combination with one another either suggests or discloses the features of the present invention recited in amended independent claim 49. Specifically, neither of the prior art references teach or suggest an electrophoresis gel tank assembly that includes a transparent side wall and a movable agitator member positioned in the tank that is movable toward the transparent side wall to urge an electrophoresis gel toward the transparent side wall so that an imaging device is focused on the electrophoresis gel.

For these reasons and others, Applicant respectfully asserts that claims 49-51 are free of the prior art and are now in condition for allowance.

Rejections Under 35 USC § 102: Danziger (5,344,534)

In the Office Action, claims 86-88 were rejected under 35 USC § 102(b) as allegedly being anticipated by the disclosure of Danziger (5,344,534). Applicant respectfully requests reconsideration of the rejection because the Danziger reference neither suggests nor discloses the various features recited in amended independent claim 86. Specifically, the Danziger

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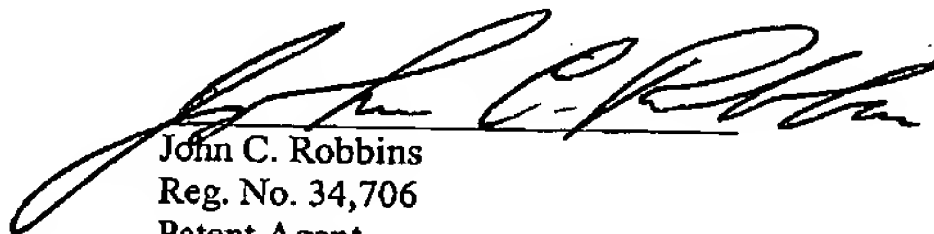
reference fails to disclose a method of staining a plurality of electrophoresis gel slabs where the gel slabs are each installed in a corresponding clamp, with the gel slabs suspended in a tank and where the clamps are supported on an upper portion of the tank thereby suspending the gel slabs in a staining solution within the tank. The Danziger reference further fails to disclose reciprocating the gel clamps and gels in a substantially linear direction within the tank to agitate the staining solution.

Rather, the Danziger reference discloses an electrophoresis apparatus where a gel or gels are fixed in position within a tank and are not attached to a clamp and are further not agitated or moved during staining.

For this reason and others, Applicant respectfully asserts that the claims are free of the prior art and are now in condition for allowance.

Respectfully submitted,

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